



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

April 11, 2013

Via E-mail

Dr. Yaron Daniely
Chief Executive Officer, President and Director
Alcobra Ltd.
65 Rothschild Blvd.
Tel Aviv 65785 Israel

**Re: Alcobra Ltd.
Amendment No. 3 to Registration Statement on Form F-1
Filed April 5, 2013
File No. 333-186003**

Dear Dr. Daniely:

We have reviewed your amended registration statement and response letter each filed April 5, 2013, and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Capitalization, page 27

1. The column labeled "Pro Forma" appears to be an adjustment column between "Actual" and "Pro Forma as adjusted" rather than the pro forma basis as described. In addition, \$8,324 in the Pro Forma as adjusted column should be negative. Please revise.

Note 10 Related Party Transactions, page F-22

2. Disclose the relationship of the company with the persons holding the convertible notes as required by ASC 850-10-50-1a.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

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You may contact Keira Nakada at (202) 551-3659 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Karen Ubell at (202) 551-3873, Jennifer Riegel at (202) 551-3575, or me at (202) 551-3710 with any other questions.

Sincerely,

/s/ Jennifer Riegel for

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Edwin L. Miller, Jr.
ZAG/S&W LLP